

Amendments to the Claims

Following is a complete set of claims as amended with this Response. This complete set of claims excludes cancelled claims 6, 11, 16 and includes amended claims 5, 7, 8, 10, 12-15, 17-20 and new claims 21-24.

1. (Original) A method for detecting an evoked response in a cardiac stimulation device implanted in a patient, the device having an evoked response detection algorithm, the method comprising:
 - receiving one or more signals from a sensor;
 - processing the one or more signals to determine a patient state; and
 - modifying the evoked response detection algorithm based on the detected patient state.
2. (Original) The method of claim 1, wherein the evoked response detection algorithm is modified by calibrating the algorithm using one or more parameter values pertaining to the detected patient state.
3. (Original) The method of claim 1, wherein the evoked response detection algorithm is modified by selecting one or more parameter values based on the detected patient state.
4. (Original) The method of claim 2, further comprising:
 - providing a first set of parameter values that correspond with a first patient state;
 - providing a second set of parameter values that correspond with a second patient state; and
 - modifying the set of parameter values to the first set or the second set based on the detected patient state.

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5. (Currently Amended) The method of claim 1, further comprising:
disabling the an automatic capture detection function if the patient state is unstable.

6. (Cancelled)

7. (Currently Amended) ~~The system of claim 6,~~ An implantable cardiac device comprising:

a memory configured to store plural sets of parameter values corresponding to various patient states;

a sensor that is operative to generate one or more signals indicative of a patient state; and

a controller that is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and use the corresponding set of parameter values to process sensed electrical activity;

wherein the ~~control circuitry~~ controller is configured to modify the evoked response detection algorithm by:

retrieving a position set comprising a plurality of parameter values pertaining to the orientation of the patient; and

calibrating the evoked response detection algorithm using the position set of parameter values.

8. (Currently Amended) The system of claim 7, wherein the ~~control circuitry~~ controller is configured to calibrate the an evoked response detection algorithm by:

replacing the position set of parameter values with a new position set of parameter values in the evoked response detection algorithm; and

employing the new operating set in the evoked response detection algorithm.

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9. (Original) The system of claim 7, wherein the control circuitry is further configured to:

establish a first setting for the position set of parameter values when the patient is vertically oriented;

establish a second setting for the position set of parameter values when the patient is horizontally oriented; and

modify the set of parameter values to the first setting or the second setting based on the orientation of the patient.

10. (Currently Amended) ~~The system of claim 6,~~ An implantable cardiac device comprising:

a memory configured to store plural sets of parameter values corresponding to various patient states;

a sensor that is operative to generate one or more signals indicative of a patient state; and

a controller that is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and use the corresponding set of parameter values to process sensed electrical activity;

wherein the ~~control circuitry~~ controller is further configured to disable the an automatic capture detection function to prevent false loss of capture detection when the signal indicates that the an orientation of the patient is changing.

11. (Cancelled)

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12. (Currently Amended) ~~The method of claim 11,~~ A method for modifying a detection algorithm implemented by an implantable stimulation device, comprising:
receiving one or more signals indicative of a patient state;
processing the one or more signals to determine the patient state; and
modifying the detection algorithm based on the determined patient state;
wherein receiving one or more signals comprises receiving one or more position signals.
13. (Currently Amended) The method of claim 44 12, wherein receiving one or more signals comprises receiving one or more activity signals.
14. (Currently Amended) ~~The method of claim 11,~~ A method for modifying a detection algorithm implemented by an implantable stimulation device, comprising:
receiving one or more signals indicative of a patient state;
processing the one or more signals to determine the patient state; and
modifying the detection algorithm based on the determined patient state;
wherein receiving one or more signals comprises receiving one or more position signals and one or more activity signals.
15. (Currently Amended) The method of claim 44 14, further comprising providing plural sets of parameter values corresponding to various patient states, and wherein modifying the detection algorithm further comprises using the corresponding set of parameter values based on the determined patient state.
16. (Cancelled)

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17. (Currently Amended) ~~The implantable cardiac device of claim 16, An~~
implantable cardiac device comprising:

a sensor that is operative to generate one or more signals indicative of a patient state; and

a controller that is in communication with the sensor, the controller being programmed to apply a detection algorithm to received electrical activity signals, wherein the controller is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and adjust one or more parameter values of the detection algorithm based on the determined patient state;

wherein the sensor comprises a position sensor.

18. (Currently Amended) The implantable cardiac device of claim 16 17,
wherein the sensor comprises an activity sensor.

19. (Currently Amended) ~~The implantable cardiac device of claim 16, An~~
implantable cardiac device comprising:

a sensor that is operative to generate one or more signals indicative of a patient state; and

a controller that is in communication with the sensor, the controller being programmed to apply a detection algorithm to received electrical activity signals, wherein the controller is operative to receive the one or more signals from the sensor, process the one or more signals to determine the patient state, and adjust one or more parameter values of the detection algorithm based on the determined patient state;

wherein the sensor comprises a position sensor, and further comprising an activity sensor that is operative to generate one or more signals indicative of an activity level of the patient.

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20. (Currently Amended) The implantable cardiac device of claim ~~16~~ 19, wherein the controller is operative to maintain a plurality of sets of parameter values corresponding to the respective patient states, and wherein the controller adjusts the detection algorithm by using one of the sets of parameter values based on the detected patient state.

21. (New) An implantable cardiac device comprising:
an evoked response detection algorithm;
a sensor to generate one or more signals indicative of a patient state; and
a controller to receive the one or more signals from the sensor, to process the one or more signals to determine the patient state, and to modify the evoked response detection algorithm based on the detected patient state.

22. (New) The implantable cardiac device of claim 21, wherein the evoked response detection algorithm is modified by calibrating the algorithm using one or more parameter values pertaining to the detected patient state.

23. (New) The implantable cardiac device of claim 21, wherein the evoked response detection algorithm is modified by selecting one or more parameter values based on the detected patient state.

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24. (New) The implantable cardiac device of claim 22, further comprising:
a first set of parameter values that correspond with a first patient state;
and
a second set of parameter values that correspond with a second patient state; and
wherein the set of parameter values is modified to the first set or the second set based on the detected patient state.